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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,911	09/19/2003	Kazumoto Shinojima	9319S-000551	6489

27572 7590 04/11/2007
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EXAMINER

CHIEM, DINH D

ART UNIT	PAPER NUMBER
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2883

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/666,911

Applicant(s)

SHINOJIMA, KAZUMOTO

Examiner

Erin D. Chiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,11,13,16,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11,13,16,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This office action is in response to applicant's request for continued examination filed on January 17, 2007. Currently, claims 1-2, 11, 13, 16, and 20-21 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 11, 13, 16, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katahira (US 2003/0063456 A1) in view of Villain et al. (us 6,692,263 B2).

In terms of claims 1 and 21, Katahira discloses an electronic instrument comprising:

an electro-optical panel having an electro-optical material (Figs. 5 and 6),

a light-guide plate having a first surface and a second surface on opposite sides thereof, the first surface facing the electro-optical panel and extending substantially parallel with the electro-optical panel in a predetermined direction, a thickness of the light-guide plate gradually decreasing in the predetermined direction so that the second surface is inclined with respect to the electro-optical panel (442);

a wiring circuit board disposed at the inclined second surface of the light-guide plate (431);

a conductive terminal disposed on the wiring circuit board (Para [0080]-[0081]);

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a circuit board (411);

a connector mounted on the circuit board and having an elastically deformable compression-type connector terminal (406) in conductive contact with the terminal on the wiring circuit board at the conductive contact position, the connector being shiftable in the predetermined direction on the circuit board and the conductive contact position between the connector terminal of the connector.

However, Katahira does not explicitly disclose the specificity of a connector mounted *on the circuit board at a position between the wiring circuit board and the circuit board and is in conductive contact with the terminal on the wiring circuit board or circuit board at the conductive contact position.*

Villain discloses a spring connector for electrically connecting tracks on a display screen with an electrical circuit. Fig. 1 and 3 shows that the spring connector is in electrical contact with element V (glass face), lightguide (5), and printed circuit for the purpose of providing compression holding means to hold LCD screen and circuit together in conductive contact (Col. 1, lines 30-67 to col. 2, lines 1-6).

It would have been obvious to one having ordinary skill in the art to recognize the disclosure of Villain provides the motivation to place the spring connector in between the “circuit board” and the “wiring circuit board” to hold the lightguide and the wiring circuit together in conductive contact. Therefore, it would have been obvious to modify Kitahara’s invention to place the elastically deformable compression-type connector terminal in between the “circuit board” and the “wiring circuit board,” as claimed since Kitahara teaches the elastically deformable compression-type connector terminals, and paragraph [0080] discloses the various

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substrates (410, 411, 412, 414, 434, 410, 430, 431, 432) all have conductive wiring patterns on the opposing sides such that they are all in conductive contact with one another.

Claim 2, as rejected over Katahira in view of Villain above, Katahira further discloses a fixing structure (Fig. 5, '401') for fixing the holding member on a mounting surface of the circuit board at the arrangement position.

Claim 11, as rejected over Katahira in view of Villain above, Katahira further discloses the controlling means for controlling the electro-optical device is disclosed in paragraph [0007].

As to claims 13 and 16, the circuit board is provided with a mounting terminal (401), which is brought into conductive contact with the connector, and has a shape extending in the predetermined direction.

As to claim 20, the light source for introducing light inside the light guide plate from an edge of the light guide plate (421 and 441) wherein the light source is arranged to oppose and edge of the light guide plate disposed in a direction opposite to the predetermined direction.

Response to Arguments

Applicant's arguments with respect to claims 1-2, 11, 13, 16, and 20-21 have been considered but are moot in view of the new ground(s) of rejection. Examiner provided new grounds of rejection in response to applicant's amended limitations.

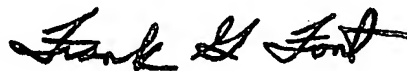
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Frank G. Font
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Erin D Chiem
Examiner
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